

AMENDMENTS TO THE CLAIMS

1. (Currently amended) A three-dimensional (3-D) interactive display comprising:
a display ~~monitor-screen~~;
an array of capaciflective pixels disposed upon said ~~monitor-~~display screen;
a first group of sensor pads connected to ones of said array of capaciflective pixels;
a second group of sensor pads connected to ones of said array of capaciflective pixels, capaciflective pixels connected to said first group of sensor pads not being connected to said second group of sensor pads thereby forming a transparent capaciflector camera; and
an operational amplifier connected to each of said sensor pads, each said amplifier biasing and receiving a signal from a connected sensor pad responsive to intrusion of a probe disposed in front of said monitor-display screen, said signal being proportional to probe positional location with respect to said ~~monitor-~~display screen so as to facilitate a direct 3-D input to said display screen.
2. (Currently amended) The 3-D interactive display of claim 1, further comprising: a transparent shield layer disposed between said ~~monitor-~~display screen and said array of capaciflective pixels.
3. (Currently amended) The 3-D interactive display of claim, 1, wherein capaciflective pixels connected to said first group of sensor pads are arranged in columns and capaciflective pixels connected to said second group of sensor pads are arranged in rows.
4. (Currently amended) The 3-D interactive display of claim 2, wherein capaciflective pixels connected to each sensor pad of said first group and said second group comprises:
a plurality of parallel wires;
a turnaround at one end of said plurality of parallel wires; and
a sensor pad at an opposite end of said plurality of parallel wires.
5. (Currently amended) The 3-D interactive display of claim 4, wherein said plurality of parallel wires comprises five wires spaced a half a centimeter apart, each of said wires spanning said display screen.
6. (Currently amended) The 3-D interactive display of claim 4, wherein each of said parallel wires are silver.
7. (Currently amended) The 3-D interactive display of claim 1, further comprising a protective coating over said array.

8. (Currently amended) **The 3-D interactive display of claim 1**, wherein each of said capacitive pixels is a transparent conductive plate.
9. (Currently amended) **The 3-D interactive display of claim 8** wherein capacitive pixels connected to each of said sensor pads in each of said first and second groups are arranged in alternating pixels and spaces such that when capacitive pixels connected to sensor pads from said first group are overlaid by capacitive pixels from said second group, said display screen is covered with a single layer of alternating pixels from either group.
10. (Currently amended) **The 3-D interactive display of claim 9** wherein each of said capacitive pixels is a layer of conductive glass.
11. (Currently amended) **The 3-D interactive display of claim 2** wherein said transparent shield layer is a layer of conductive glass, said shield layer and said capacitive pixels being biased and driven identically.
12. (Currently amended) **The 3-D interactive display of claim 2** wherein said transparent shield layer is a layer of conductive glass.
13. (Currently amended) **The 3-D interactive display of claim 11**, said shield layer including a shield pad, said shield pad connected to another operational amplifier, said 3-D interactive display further comprising:
an oscillator driving operational amplifiers connected to each sensor pad and said shield pad, said shield being biased and driven identically to said capacitive pixels.
14. (Currently amended) **The 3-D interactive display of claim 13**, said oscillator frequency being 100 KHz, said oscillator output voltage being 12 volts or less.
15. (Currently amended) **The 3-D interactive display of claim 14**, said 3-D interactive display being connected to and interfacing with a computer.
16. (Currently amended) ~~A method of forming a transparent capacitive camera~~
making a 3-D interactive display, said method comprising the steps of:
a) **forming a shield layer on a non-conductive substrate, said shield layer being a transparent layer of conductive material;**
b) **forming a first dielectric layer on said shield layer;**
c) forming a first wire layer on said first dielectric layer;
d) forming a second dielectric layer over said first wire layer;
e) forming a second wire layer over said second dielectric layer; and
f) **forming a protective coating layer on said second wire layer so as to facilitate a direct 3-D input to said protective coating layer.**
17. (Canceled)

18. (Currently amended) **The method of claim 16** wherein the second wire layer is formed orthogonally to said first wire layer.

19. (Currently amended) **The method of claim 18** wherein said steps **c) and d)** **further comprise:**

- i) forming a plurality of groups of parallel wires spanning said substrate;
- ii) forming a turnaround at one end of said of each of said groups; and
- iii) forming a pad at an opposite end of each said groups.

20. (Currently amended) **The method of claim 19** wherein in step (i) each wire is formed by depositing silver paste and curing said deposited silver paste.

21. (Currently amended) **The method of claim 16** wherein said shield layer is formed by depositing a layer of conductive glass on a glass substrate.

22. (Currently amended) **The method of claim 21** further comprising forming a shield pad on said conductive glass layer.

23. (Currently amended) **The method of claim 22** further comprising forming vias to pads in each of said shield layer and said wire layers.

24. (Currently amended) **The method of claim 22** further comprising:
forming a first pixel layer, said first pixel layer being formed on said first wire layer, said second dielectric layer being formed on said first pixel layer; and
forming a second pixel layer on said second dielectric layer, said second wire layer being formed on said second pixel layer.

25. (Currently amended) **The method of claim 22** wherein said first pixel layer and said second pixel layer are each comprised of a plurality of pixel plates.

26. (Currently amended) **A transparent-capacitector (TC)-camera 3-D interactive display comprising:**

a display screen;
a transparent shield layer on said display screen;
a first dielectric layer on said shield layer;
a first wire layer on said first dielectric layer, wires on said first wire layer disposed in a first direction;
a second dielectric layer on said first wire layer;
a second wire layer on said second dielectric layer, wires on said second wire layer disposed orthogonally to wires on said first wire layer; and
a surface dielectric layer on said second wire layer so as to facilitate direct 3-D input to said display screen.

27. (Currently amended) **The TC-camera device of claim 26**, wherein said first wire layer and said second wire layer each comprises:
a plurality of groups of parallel wires;

a turnaround at one end of each said group of parallel wires; and
a sensor pad at an opposite end of each said group of parallel wires.

28. (Currently amended) The TC-camera device of claim 27 wherein each said group of parallel wires comprises five silver wires spaced a half a centimeter apart.

29. (Currently amended) The TC-camera device of claim 26 wherein said transparent shield layer is a layer of conductive glass and includes a shield pad disposed at one side.

30. (Currently amended) The A-TC-camera device of claim 29, further comprising:
a via at each said sensor pad; and
a via at said shield pad, each said via filled with silver epoxy and extending upward from said sensor pad or said shield pad to an upper surface of said surface dielectric layer.

31. (Currently amended) A transparent-capacitector (TC)-camera 3-D interactive display comprising:
a display screen;
a transparent shield layer on said display screen;
a first dielectric layer on said transparent shield layer;
a first wire layer on said first dielectric layer;
a first pixel layer, wires on said first wire layer contacting pixels on said first pixel layer;
a second dielectric layer on said first pixel layer;
a second pixel layer on said second dielectric layer;
a second wire layer on said second pixel layer, wires on said second wire layer contacting pixels on said second pixel layer; and
a surface dielectric layer on said second wire layer so as to facilitate direct 3-D input to said display screen.

32. (Currently amended) The TC-camera device of claim 31, wherein each wire on said first wire layer and said second wire layer contacts a sensor pad.

33. (Currently amended) The TC-camera device of claim 32 wherein said transparent shield layer and each pixel is a layer of conductive glass, said transparent shield layer including a shield pad disposed at one side.

34. (Currently amended) The TC-camera device of claim 31, further comprising:
a via at each said sensor pad; and
a via at said shield pad, each said via filled with silver epoxy and extending upward from said sensor pad or said shield pad to an upper surface of said surface dielectric layer.